**Amendments to the Claims**:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An electronic ~~circuit~~ circuit, comprising:

a shift circuit ~~for shifting~~ that shifts j-bit digital data (j is a natural number) to be converted into k-bit digital data (k is a natural number); and

a correction circuit ~~being~~ that is electrically ~~connected~~ coupled to the shift circuit, the correction circuit continuously ~~changing~~ changes the k-bit digital data ~~which~~ that is obtained by the shift circuit in accordance with the change of the j-bit digital data.

2. (Currently Amended) The electronic circuit according to Claim 1,

~~wherein~~ the k-bit digital data ~~is~~ being extended digital data which is larger than the j-bit digital data; and

~~wherein~~ the shift circuit ~~classifies~~ classifying a range of the j-bit digital data into a plurality of groups and ~~shifts~~ shifting the digital data of each group by a predetermined number of bits in accordance with each group to convert it into the k-bit digital data.

3. (Currently Amended) The electronic circuit according to Claim 2,

~~wherein~~ the correction circuit ~~is~~ being electrically ~~connected~~ coupled to electro-optical elements;

~~wherein~~ the j-bit digital data ~~is~~ being luminance gray scale data ~~for controlling~~ that controls the luminance of the electro-optical elements; and

~~wherein~~ the k-bit digital data ~~is~~ being extended luminance gray scale data ~~for controlling~~ that controls an amount of analog current ~~which~~ that is supplied to the electro-optical elements.

4. (Currently Amended) The electronic circuit according to Claim 1,

~~wherein~~ the correction circuit ~~is~~ being an adder.

5. (Currently Amended) The electronic circuit according to Claim 1,

~~wherein~~ the shift circuit ~~determines the~~ determining a number of bits by which the j-bit digital data is shifted in accordance with the value of the j-bit digital data.

6. (Currently Amended) The electronic circuit according to Claim 5,

~~wherein~~ the shift circuit ~~performs~~ performing shifting to the upper side so that a larger value group is shifted by a larger number of bits.

7. (Currently Amended) An electro-optical ~~device~~ device, comprising:

a control circuit ~~for outputting~~ that outputs j-bit luminance gray scale data (j is a natural number);

a driving circuit ~~for generating~~ that generates analog driving signals based on the j-bit luminance gray scale data; and

a pixel circuit ~~for driving~~ that drives current driven elements based on the analog driving signals,

~~wherein~~ the driving circuit ~~comprises~~ including:

a shift circuit ~~for shifting~~ that shifts the j-bit luminance gray scale data to convert ~~it~~ the data into k-bit digital data (k is a natural number);

a correction circuit ~~being~~ that is electrically ~~connected~~ coupled to the shift circuit, the correction circuit continuously changing the k-bit digital data ~~which~~ that is obtained by the shift circuit in accordance with the change of the j-bit luminance gray scale data.

8. (Currently Amended) The electro-optical device according to Claim 7,

~~wherein~~ the k-bit digital data ~~is~~ being extended digital data ~~which~~ that is larger than the j-bit luminance gray scale data; and

~~wherein~~ the shift circuit ~~classifies~~ classifying a range of the j-bit digital data into a plurality of groups and ~~shifts~~ shifting the digital data of each group by a predetermined

number of bits in accordance with each group to convert ~~it~~ the digital data into the k-bit digital data.

9. (Currently Amended) The electro-optical device according to Claim 7, ~~wherein~~ the correction circuit ~~is~~ being an adder.

10. (Currently Amended) The electro-optical device according to Claim 7, ~~wherein~~ the shift circuit ~~determines the~~ determining a number of bits by which the j-bit luminance gray scale data is shifted in accordance with the value of the j-bit luminance gray scale data.

11. (Currently Amended) The electro-optical device according to Claim 10, ~~wherein~~ the shift circuit ~~performs~~ performing shifting to ~~the~~ an upper side so that a larger value group is shifted by a larger number of bits.

12. (Currently Amended) The electro-optical device according to Claim 7, ~~wherein~~ the current driven elements ~~are~~ being EL elements.

13. (Currently Amended) The electro-optical device according to Claim 12, ~~wherein~~ the EL elements ~~comprise~~ including light emitting layers made of organic materials.

14. (Currently Amended) An electronic ~~apparatus~~ apparatus, in which the electronic circuit according to Claim 1 is mounted thereon.

15. (Currently Amended) An electronic ~~apparatus~~ apparatus, in which the electro-optical device according to Claim 7 is mounted thereon.